

## **Section 17869. General Record Keeping Requirements.**

- a) Records shall be kept in one location and accessible for five (5) years shall be available for inspection during normal working hours.
  - b) Log of special occurrence, which includes methods used to resolve problems arising from these events, also details of all incidents that required implementing emergency procedures.
  - c) Public complaints
    - 1) the nature of the complaint,
    - 2) the date the complaint was received,
    - 3) if available, the name, address, and telephone number of the person or persons making the complaint, and
    - 4) any actions taken to respond to the complaint.
  - d) Record the quantity and type of feedstock received and quantity of compost and chipped and ground material produced. Agricultural compostable materials handling operations shall maintain records only for compostable material accepted from off-site.
  - e) Record the number of load checks performed and loads rejected
  - f) record all test results generated by compliance with Article 7 of this Chapter, including but not limited to,
    - metal concentrations,
    - fecal coliform and Salmonella sp. densities,
    - temperature measurements, and
    - dates of windrow turnings.
- (1) The operator shall retain records detailing pathogen reduction methods.
- g) The operator shall record and retain records of any serious injury to the public occurring on-site and any complaint of adverse health effects to the public attributed to operations. Serious injury means any injury that requires inpatient hospitalization for a period in excess of 24 hours or in which a member of the public suffers a loss of any member of the body or suffers any degree of permanent disfigurement.
  - h) The operator shall retain a record of training and instruction completed in accordance with section 17867.5.

### **Section 17867.5. Training.**

(a) Compostable materials handling operations and facilities shall meet the following requirements:

(1) Operators shall ensure that all personnel assigned to the operation shall be trained in subjects pertinent to operations and maintenance, including the requirements of this article, physical contaminants and hazardous materials recognition and screening, with emphasis on odor impact management and emergency procedures. A record of such training shall be maintained on the site.

**Article 7. Environmental Health Standards**  
**Sections 17868.1. Sampling Requirements,**  
**17868.2. Maximum Metal Concentrations,**  
**17868.3. Pathogen Reduction**  
**17868.5. Green Material Processing**  
**Requirements**

**Section 17868.1. Sampling Requirements.**

All composting operations that sell or give away greater than 1,000 cubic yards of compost annually, and all facilities shall meet the following requirements:

(a) Operators shall verify that compost meets the maximum acceptable metal concentration limits specified in section 17868.2, and pathogen reduction requirements specified in section 17868.3. Verification of pathogen reduction requirements shall occur at the point where compost is sold and removed from the site, bagged for sale, given away for beneficial use and removed from the site or otherwise beneficially used. This verification shall be performed by taking and analyzing at least one composite sample of compost, following the requirements of this section as follows:

(1) An operator who composts green material, food material, or mixed solid waste shall take and analyze one composite sample for every 5,000 cubic-yards of compost produced.

(2) An operator who composts biosolids shall meet the sampling schedule described in Table 1 below.

| <b>Table 1</b><br><b>Frequencies of Compost Sampling for Biosolids Composting Facilities</b> |                  |
|--|------------------|
| <b>Amount of Biosolids Compost Feedstock</b><br><b>(metric tons per 365 day period)</b>      | <b>Frequency</b> |
| Greater than zero but annually fewer than 290  | annually         |
| Equal to or greater than 290 but fewer than 1,500  | quarterly        |
| Equal to or greater than 1,500 but fewer than 15,000   | bimonthly        |
| Equal to or greater than 15,000  | monthly          |

(A) The amount of biosolids compost feedstock shall be calculated in dry weight metric tons.

(3) Composite sample analysis for maximum acceptable metal concentrations, specified in section 17868.2, shall be conducted at a laboratory certified by the California Department of Health Services, pursuant to the Health and Safety Code.

(b) A composite sample shall be representative and random, and may be obtained by taking twelve (12) mixed samples as described below.

(1) The twelve samples shall be of equal volume.

(2) The twelve samples shall be extracted from within the compost pile as follows:

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- (A) Four samples from one-half the width of the pile, each at a different cross-section;
  - (B) Four samples from one-fourth the width of the pile, each at a different cross-section;
  - and,
  - (C) Four samples from one-eighth the width of the pile, each at a different cross-section.
- (c) The EA may approve alternative methods of sampling for a green material composting operation or facility that ensures the maximum metal concentration requirements of section 17868.2 and the pathogen reduction requirements of section 17868.3 are met.

**Note:**

**Authority cited:**

Sections 40502, 43020, and 43021 of the [Public Resources Code](#).

**Reference:**

Sections 43020 and 43021 of the [Public Resources Code](#).

### Section 17868.2. Maximum Metal Concentrations.

- (a) Compost products derived from compostable materials that contains any metal in amounts that exceed the maximum acceptable metal concentrations shown in Table 2 shall be designated for disposal, additional processing, or other use as approved by state or federal agencies having appropriate jurisdiction.

| <b>Table 2</b>                                 |  |
|--|--|
| <b>Maximum Acceptable Metal Concentrations</b> |  |
| <b>Constituent</b>                             | <b>Concentration (mg/kg)<br/>on dry weight basis</b> |
| Arsenic (As)                                   | 41   |
| Cadmium (Cd)                                   | 39   |
| Chromium (Cr)                                  | 1200   |
| Copper (Cu)                                    | 1500   |
| Lead (Pb)                                      | 300  |
| Mercury (Hg)                                   | 17   |
| Nickel (Ni)                                    | 420  |
| Selenium (Se)                                  | 36   |
| Zinc (Zn)                                      | 2800   |

- (b) Alternative methods of compliance to meet the requirements of Subdivision (a) of this section, including but not limited to sampling frequencies, may be approved by the EA for green and food materials composting operations and facilities if the EA determines that the alternative method will ensure that the maximum acceptable metal concentrations shown in Table 2 are not exceeded.

**Note:**

**Authority cited:**

Sections 40502, 43020, and 43021 of the [Public Resources Code](#).

**Reference:**

Sections 43020 and 43021 of the [Public Resources Code](#).

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### **Section 17868.3. Pathogen Reduction.**

(a) Compost products derived from compostable materials, that contains pathogens in amounts that exceed the maximum acceptable pathogen concentrations described in Subdivision (b) of this section shall be designated for disposal, additional processing, or other use as approved by state or federal agencies having appropriate jurisdiction.

(b) Operators that produce compost shall ensure that:

(1) The density of fecal coliform in compost, that is or has at one time been active compost, shall be less than 1,000 Most Probable Number per gram of total solids (dry weight basis), and the density of *Salmonella* sp. bacteria in compost shall be less than three (3) Most Probable Number per four (4) grams of total solids (dry weight basis).

(2) At enclosed or within-vessel composting process operations and facilities, active compost shall be maintained at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 3 days.

(A) Due to variations among enclosed and within-vessel composting system designs, including tunnels, the operator shall submit a system-specific temperature monitoring plan with the permit application to meet the requirements of Subdivision (b)(2) of this section.

(3) If the operation or facility uses a windrow composting process, active compost shall be maintained under aerobic conditions at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 15 days or longer. During the period when the compost is maintained at 55 degrees Celsius or higher, there shall be a minimum of five (5) turnings of the windrow.

(4) If the operation or facility uses an aerated static pile composting process, all active compost shall be covered with 6 to 12 inches of insulating material, and the active compost shall be maintained at a temperature of 55 degrees Celsius (131 degrees Fahrenheit) or higher for a pathogen reduction period of 3 days.

(c) Alternative methods of compliance to meet the requirements of Subdivision (b) of this section may be approved by the EA if the EA determines that the alternative method will provide equivalent pathogen reduction.

(d) Compost operations and facilities shall be monitored as follows to ensure that the standards in Subdivision (b) of this section are met:

(1) Each day during the pathogen reduction period, at least one temperature reading shall be taken per every 150 feet of windrow, or fraction thereof, or for every 200 cubic-yards of active compost, or fraction thereof.

(2) Temperature measurements for pathogen reduction shall be measured as follows:

(A) Windrow composting processes and agitated bays shall be monitored twelve (12) to twenty-four (24) inches below the pile surface;

(B) Aerated static pile composting processes shall be monitored twelve (12) to eighteen (18) inches from the point where the insulation cover meets the active compost

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### **Section 17868.5. Green Material Processing Requirements.**

In order for a feedstock to be considered green material, as defined in section 17852(a)(21), the following requirements shall be met:

- (a) The feedstock shall undergo load checking to ensure that physical contaminants are no greater than 1.0 percent of total weight. Load checking shall include both visual observation of incoming waste loads and load sorting to quantify percentage of contaminating materials.
  - (1) A minimum of one percent of daily incoming feedstock volume or at least one truck per day, whichever is greater, shall be inspected visually. If a visual load check indicates a contamination level greater than 1.0 percent, a representative sample shall be taken, physical contaminants shall be collected and weighed, and the percentage of physical contaminants determined. The load shall be rejected if physical contaminants are greater than 1.0 percent of total weight.
- (b) Upon request of the EA, the operator shall take a representative sample of feedstock, physical contaminants shall be collected and weighed, and the percentage of physical contaminants determined.
- (c) Any agricultural material handling operation using this material shall ensure the feedstock meets the metal concentration limits specified in Table 2 of section 17868.2.
- (d) Facility personnel shall be adequately trained to perform the activities specified in this section.
- (e) Any operation or facility using this feedstock shall maintain records demonstrating compliance with this section.

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### **17863.4. Odor Impact Minimization Plan.**

- (a) All compostable material handling operations and facilities shall prepare, implement and maintain a site-specific odor impact minimization plan. A complete plan shall be submitted to the EA with the EA Notification or permit application.
- (b) Odor impact minimization plans shall provide guidance to on-site operation personnel by describing, at a minimum, the following items. If the operator will not be implementing any of these procedures, the plan shall explain why it is not necessary.
- (1) an odor monitoring protocol which describes the proximity of possible odor receptors and a method for assessing odor impacts at the locations of the possible odor receptors; and,
  - (2) a description of meteorological conditions effecting migration of odors and/or transport of odor-causing material off-site. Seasonal variations that effect wind velocity and direction shall also be described; and,
  - (3) a complaint response protocol; and,
  - (4) a description of design considerations and/or projected ranges of optimal operation to be employed in minimizing odor, including method and degree of aeration, moisture content of materials, feedstock characteristics, airborne emission production, process water distribution, pad and site drainage and permeability, equipment reliability, personnel training, weather event impacts, utility service interruptions, and site specific concerns; and,
  - (5) a description of operating procedures for minimizing odor, including aeration, moisture management, feedstock quality, drainage controls, pad maintenance, wastewater pond controls, storage practices (e.g., storage time and pile geometry), contingency plans (i.e., equipment, water, power, and personnel), biofiltration, and tarping.
- (c) The odor impact minimization plan shall be revised to reflect any changes, and a copy shall be provided to the EA, within 30 days of those changes.
- (d) The odor impact minimization plans shall be reviewed annually by the operator to determine if any revisions are necessary.
- (e) The odor impact minimization plan shall be used by the EA to determine whether or not the operation or facility is following the procedures established by the operator. If the EA determines that the odor impact minimization plan is not being followed, the EA may issue a Notice and Order (pursuant to section 18304) to require the operator to either comply with the odor impact minimization plan or to revise it.
- (f) If the odor impact minimization plan is being followed, but the odor impacts are still occurring, the EA may issue a Notice and Order (pursuant to section 18304) requiring the operator to take additional reasonable and feasible measures to minimize odors.

#### **Note:**

#### ***Authority cited:***

*Sections 40502, 43020, 43021 and 43209.1 of the [Public Resources Code](#).*

#### ***Reference:***

*Sections 43020, 43201 and 43209.1 of the [Public Resources Code](#).*